

Juvenile Loggerhead Shrike "Begging" from its Prey

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On 27 August 1985, at 08:30, we observed a juvenile Loggerhead Shrike (Lanius ludovicianus) perched on a fence on the Mississippi State University South Farm in Oktibbeha County, Mississippi. We dropped a bal-chatri trap containing a half-grown brown laboratory mouse (Mus musculus) in view of the shrike and drove on to give the shrike an opportunity to come to the trap. We returned to the site 3 minutes later and the juvenile shrike was eating an insect while perched on the wire fence. As we were watching, it noticed the mouse in the trap and flew to it, landing on the ground beside the trap. The shrike hopped around the trap, repeatedly lowering its head and tail, fluttering its wings, opening its beak, and uttering begging calls. Although the head was lower than the back, the shrike's eyes and bill were continually oriented toward the mouse. The tail was lowered slightly, but the rectrices were not spread. There were about 14 begging sequences (bowing-fluttering-calling) from various positions around the mouse. Each lasted 4-5 seconds. After about 5 minutes of circling the mouse, the juvenile shrike finally hopped on the trap, attempted to reach the mouse inside, and was caught in the snares on the trap.

Smith (1973a) described a similar "flutter" display in Loggerhead Shrikes and hypothesized that its function is primarily for territorial defense. In the flutter display, the shrike holds its body in a horizontal position, lowers its head with the bill at approximately a 45 degree angle to the ground, flutters its wings, and spreads its tail. Smith noted that Loggerhead Shrikes only give this display when another shrike is present. She (1973b) also found that an approximately 24-day-old shrike spends a great deal of time "hopping along the ground, stopping, bowing forward with fluttering wings and then seizing an object in its bill."

Cade (1962) found that Northern Shrikes (L. excubitor) often flutter their wings and spread the tail in an attempt to flush prey during hunting bouts.

We have both observed Loggerhead Shrike fledglings give a begging display before being fed by their parents. In these instances, the young birds lowered their bodies to a horizontal position, fluttered their wings, oriented their eyes and opened beak toward the parent, and gave begging calls. We could discern no difference between such begging and the behavior of this fledgling toward the mouse. Differences between this begging display and the flutter display described by Smith are: (1) In the begging display, the bill and eyes are oriented toward the food source, whereas in the flutter display they are oriented toward the ground. (2) Vocalizations are a conspicuous part of the begging display, but not the flutter display. (3) The tail was not spread during the begging display, but is during the flutter display.

We feel that the juvenile shrike was indeed begging from its intended prey and offer the following as a possible explanation for such behavior. When the parent shrike brings food to the nest, the young respond by begging. Because they must compete with their siblings for food, their gaze may be fixed on the food, rather than on the adult bringing it. When the parent holds the food close enough, the nestling grabs it, but must be quick or the food may be taken by a sibling. During the transition to self-feeding, the fledgling may first pass through a phase where it recognizes potential food on sight, and responds as it did in the nest - by begging. If the food starts to move away, the fledgling then pounces. We feel that the fledgling shrike may have to learn that begging isn't needed in order to get food and that the quicker the "pounce," the more likely it will be to capture the prey.

Such begging might cause potential prey to flush, as suggested by Cade, and thus might be retained in the birds' foraging repertoire. We can also see how this "flutter-before-pouncing" sequence might have become a territorial display such as described by Smith. The flutter may signal an intruder that the territory holder is about to pounce on him and that the intruder should therefore leave. Smith (1973a) also suggested that the flutter display might indicate a "high attack-tendency."

Literature Cited

- Cade, T.J. 1962. Wing movements, hunting, and displays of the Northern Shrike. *Wilson Bull.* 74:386-408.
- Smith, S.M. 1973a. An aggressive display and related behavior in the Loggerhead Shrike. *Auk* 90:287-298.
- Smith, S.M. 1973b. A study of prey-attack behavior in young Loggerhead Shrikes, Lanius ludovicianus L. *Behaviour* 44:113-141.